

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	09/633,111	CARLSSON ET AL.	
	Examiner	Art Unit	
	Bao-Thuy L. Nguyen	1641	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 8/25/2004 and claims in an after final amendment filed 6/24/2004.
2. ☒ The allowed claim(s) is/are 1-23 which have been renumbered.
3. ☒ The drawings filed on 04 August 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.  |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Holly Kozlowski on October 28, 2004.

The application has been amended as follows:

Claims 1, line 1, replaced "A" with -An ion-exchange-.

Claim 8, line 1, replaced "A" with -An ion-exchanged-.

Claim 9, line 2, replaced "a" with -the--.

Claim 11, line 1, replaced "A" with -An ion-exchange-;

parts (a), line 3, replaced "functions" with -functional groups--;

part (b), line 2, replaced "functions" with -functional groups--;

part (b), line 3, deleted "sufficient";

part (d), line 3, inserted -from- between "and" and "the sample".

Claim 12, line 1, replaced "A" with -An ion-exchange-;

Part (a), line 3, replaced "functions" with -functional groups--;

Part (a), line 5, inserted -from- between "and" and "a sample".

Claim 13, line 1, replaced "A" with -An ion-exchange-;

Line 4, replaced "functions" with -functional groups--.

Claim 17, replaced "8" with -9--.

Claim 18, line 1, replaced "apparatus" with -ion-exchange chromatographic device--.

Claim 22, replaced "8" with -9--.

Claim 23, line 1, replaced "apparatus" with -ion-exchange chromatographic device--.

*Reason(s) for Allowance*

2. The following is an examiner's statement of reasons for allowance: the claims define over the prior art of record because the prior art of record fails to specifically teach a device and method for ion-exchange chromatography using polymeric membranes such as nitrocellulose. The prior art of record generally discloses the use of DEAE column for ion-exchange chromatography to purify and isolate a specific compound and fail to teach the use of lateral polymeric membranes for ion-exchange chromatography. The reference of Pristoupil, although appearing to teach the use of nitrocellulose membrane for the separation of proteins from a mixed sample, and that the nitrocellulose membranes has ion-exchange capacity, does not specifically teach that their membranes are used as ion-exchange matrices. Specifically Pristoupil fails to teach the separation of individual proteins from a complex sample, only that two different types of proteins (i.e. high molecular weight proteins versus low molecular weight proteins) are separated into two bands, one at the beginning and one at the liquid front of the membrane. In contrast, the instant claims are drawn to ion-exchange chromatography comprising ion-exchange functional groups to separate and isolate at least two different components in a sample from each other and from the rest of the sample.

*Conclusion*

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the

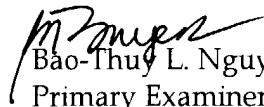
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issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao-Thuy L. Nguyen whose telephone number is (571) 272-0824. The examiner can normally be reached on Tuesday and Thursday from 8:00 a.m. -3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Bao-Thuy L. Nguyen  
Primary Examiner  
Art Unit 1641  
10/26/04